U.S. Patent Application of Nosov et al.
Serial No.: 09/509,256 – Art Unit: 1771

ATTACHMENT 1. New abstract, taken from the PCT publication (WO 99/17303; PCT/RU98/00301), with additions and deletions marked.

– ABSTRACT OF THE DISCLOSURE

The present invention relates to an X-ray absorbing material [which] that can be used in medicine as well as in the [production] manufacture of special [protection clothes, protection] protective clothing, protective screens, housings, [protection] protective coatings and isolation materials. In a first embodiment, the material uses as a filler a poly-dispersed [kneading-segregated] mixture , segregated by kneading and containing metallic particles having a size [of] between 10^{-9} and 10^{-3} m , wherein [said] the particles are bonded to the surface of a textile base. The density of the material is defined by the relation $q_N = (0.01 - .020)q_P$, where q_N is filler. In a second embodiment, [this] the invention uses as a filler the above [-mentioned] mixture , although here [though] the particles are surrounded by the volume of a matrix made of a compound that solidifies under atmospheric pressure. The total mass of the poly-dispersed and segregated mixture is defined by the relation $M = (0.05 - 0.5)m$, where M is the total mass of the X-ray absorbing poly-dispersed and segregated filler, while m is the equivalent mass of the filler material [which] that is equal [by its protective] in protective properties to the mass M. In a third embodiment, [this] the invention uses as a filler the above [-mentioned] mixture [though] with the particles [are] bonded to an intermediate substrate consisting of a textile base and surrounded by the volume of a matrix. –

ATTACHMENT 2. Amended claims 1-3 with additions and deletions marked.

1. (Amended) An X-ray absorbing material comprising a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, wherein said <u>filler</u> material [uses as a filler the segregated by intermixing] <u>is</u> a poly-dispersed mixture <u>that</u> <u>has been segregated by intermixing and that contains</u> [containing] metallic particles having a size [of] between 10^{-9} and 10^{-3} m [while] <u>fixed in</u> a textile base <u>that</u> serves as a matrix; and wherein the particles are bonded to the surface of <u>and embedded in</u> said textile base, and <u>where</u> the density of <u>the</u> X-ray absorbing material as a whole, [at] <u>given that the</u> X-ray absorbing properties [being] <u>are</u> equal to those of the material used for the particles of the X-ray absorbing filler, is defined by the relation:

[ρm = (0,01 ÷ 0,20)ρp] <u>ρm = (0.01 − 0.20)ρp</u>,

where ρm is the density of <u>the</u> X-ray absorbing material as a whole, <u>and</u>

[while] ρp is the density of the material used for the particles of the X-ray absorbing filler.

2. (Amended) An X-ray absorbing material comprising a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, where said <u>filler</u> material [uses as a filler the segregated by intermixing] <u>is a</u> poly-dispersed mixture <u>that</u> <u>has been segregated by intermixing and that contains</u> [containing] metallic particles having a size [of] between 10^{-9} and 10^{-3} m, wherein [the] said particles are surrounded by the

volume of a matrix that is made of at least one compound that solidifies under atmospheric

pressure , or made of a [the] composition derived from a [on the] base of the same

compound, and the total mass of the segregated , poly-dispersed mixture consisting of

particles of the X-ray absorbing filler [,] is defined by the relation:

M = [(0,05 ÷ 0,5)] (0.05 – 0.5) m,

where M is the total mass of the segregated poly-[disperse] dispersed mixture

consisting of the X-ray [-] absorbing filler particles, and

[while] m is the equivalent mass of the X-ray absorbing filler material equal [by its] in

protective properties to [the] mass M.

3. (Amended) An X-ray absorbing material comprising a matrix with a fixed X-ray

absorbing metal-containing filler in the form of dispersed particles, where [the] said filler

material [uses as a filler the segregated by intermixing] is a poly-dispersed mixture

containing metallic particles having a size [of] between 10^{-9} and 10^{-3} m, wherein [the] said

particles are bonded to an intermediate substrate surround by the volume of [a] the matrix

formed of at least one compound that solidifies under pressure [or executed of a

composition on the base of said compound].